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LAKE CARRIERS' ASSOCIATION.

To consider and take action upon all general questions relating to the navigation and carrying business of the Great Lakes, maintain necessary shipping offices and in general to protect the common interest of Lake Carriers, and improve the character of the service rendered to the public.

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H. S. Hodge,	Detroit.		

THE LAKE CARRIERS' ASSOCIATION.

The adjourned meeting of the Lake Carriers' finance committee, held on Monday afternoon, was well attended. In reference to the collision bend, at the head of Lake George Flats, General O. M. Poe, the United States Engineer in charge of improvements, stated that the only money possibly available at present for improving the channel would have to come from the special appropriation for the construction of the new lock, which also provided for "the improvement of the approaches thereto." The spot indicated is twelve or fifteen miles from the lock, and the vesselmen feel dubious as to whether the law will be interpreted in the desired light. Secretary George P. McKay and Counsel Harvey D. Goulder were instructed to communicate with the Secretary of War on the subject.

A communication had been received from Captain William Nicholson, of Chicago, in reference to the Pilot Island light, where at present a red light of the fourth order is exhibited thirty-eight feet above a dangerous locality. Captain Nicholson stated that it had been proposed by the inspector and engineer of the district to change this to a fifteen-second white flash light prior to the establishment of the Plum Island ranges, but as no appropriation had yet been made for these, the promise seemed very indefinite. The red light, under certain atmospheric conditions, could be seen only at a comparatively short distance, and he thought the power of the light not at all in keeping with the danger of the obstruction. Secretary McKay was instructed to communicate with the Lighthouse Board on the subject.

The following resolution was also carried unanimously:

WHEREAS, We learn with regret that Commander Nichol Ludlow, U. S. N., may be relieved from duty as Inspector of the Ninth Lighthouse District (Lake Michigan) next February or earlier, on account of expiration of detail, and

WHEREAS, This officer has commended himself in an exceptional degree through his earnest services in investigating menaces and suggesting aids to navigation; is held in the highest esteem by vessel interests on the lakes, also having performed his services acceptably to the Lighthouse Board; also in view of the fact that a new inspector requires almost a year to familiarize himself with work on the lakes, and the Lighthouse Board depends on these officers for recommendations for lights, buoys, etc.; also that no new officer could in such short time gain a knowledge of the requirements of the World's Fair navigation; therefore, be it

Resolved, That the secretary of this association be and is hereby instructed to write to Hon. Benjamin F. Tracy, Secretary of the Navy, and furnish a copy to Commander Ramsay, detail officer of the department, calling attention to the efficient services of Commander Ludlow, and requesting that he may be permitted to remain on his present duty until such time as his services are imperatively required elsewhere.

A NEW DISTRICT SUPERINTENDENT.

Through the vacancy caused by the decease of the late Capt. D. P. Dobbins, a vacancy was occasioned in the superintendency of the Ninth Life-saving district and several well qualified candidates who have served a life-time in the service sought the appointment.

Sumner I. Kimball, general superintendent of the United States Life-Saving Service, after a diligent study of all the facts presented to him eventually appointed Edwin C. Chapman, recently keeper of the Oswego station, and, as the successful candidate was taken from the ranks, as was also his predecessor, the utmost satisfaction exists in relation to the promotion.

EDWIN C. CHAPMAN.

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The number of stations embraced in the life-saving service, according to our last annual report was two hundred and twenty-five, of which forty-five are on the lakes and ten of these are in the Ninth district, now under the superintendence of Captain Chapman, who enjoys the reputation, both in government circles and among vesselmen, of being a thoroughly capable gene tlemen, ardently devoted to his noble and responsibl work.

NAVAL CONTRACTS MUST BE FULFILLED.

The Navy Department is very much dissatisfied with the inadequate deliveries of structural and armor and gun steel by the two corporations holding the contracts to supply the metal for the construction of the new vessels. It is felt that the department may be embarassed when it applies to Congress for money to continue the formation of an American Navy, by the fact that sufficient domestic steel cannot be procured to prosecute the work in hand with due celerity.

The deliveries of steel are now and have been for some time much below the contract requirements. The department has now determined to cure this state of affairs and bring the contractors to time, and notice has been sent, in at least one case, that the promises made when the contract was signed, that a proper plant would be established, must be fulfilled, and that the deliveries of steel must be brought up to the contract requirements or the contractors will be dealt with strictly according to the terms of the document.

The department has heretofore waived some of its rights in the interest of expedition. The contracts expressly forbid any transfer of the work, yet one company was allowed to exchange with the other a large part of its obligations upon reports made to the department that the work could be better and more quickly done. This was the case where one company was better fitted to make thin boiler and structural steel and the other heavy armor and gun steel. The first was to be rolled and the latter to be forged. But these concessions by the department have not been effectual, the new ships are being delayed, and hereafter the contract stipulations will probably be enforced unless an improvement is noted.

TO DETERMINE POLAR ABERRATIONS.

An instrument has been invented by a young Jesuit astronomer, of Georgetown university, whereby latitude and longitude may be determined by means of what he terms a photochronograph, being, as its name implies, a self-recording time and direction card.

The determination of latitudes, and in particular of their periodic variations, by means of photography, has repeatedly been pronounced feasible and highly desirable. The intention is to study the periodic variations of the Pole. A second permanent latitude station is being erected at Manila, in the Phillipine Islands. Since Manila is almost opposite Washington in longitude, these two stations seem to be well adapted for controlling the periodic variations of the Pole by a uniform method, in a direction almost perpendicular to the meridians of Berlin and Honolulu, where simultaneous observations are carried on at present.

CHICAGO'S LAKE FRONT.

Argument has been heard at Washington, D. C., in the United States Supreme Court in what is known as the lake front cases, involving title to a large amount of valuable ground on the shore of Lake Michigan at Chicago. There are four cases on the records, all brought on appeal from the decision of the Circuit Court of the United States for the Northern district of Illinois. The Illinois Central railroad is on one side of the case, and the city of Chicago, State of Illinois and United States on the other. The federal government appears in them involuntarily and will not attempt to make an argument in court. Attorney General Hunt argued the case for the State of Illinois, and John N. Jewett on behalf of the claims of the Illinois Central railroad. After hearing counsel's argument the court adjourned, and as the Columbian celebration was to be attended on Tuesday, it is reasonably certain that a decision will be delayed at least two weeks, and it may be delayed as many months or even longer.

NEWS AROUND THE LAKES.

CLEVELAND, O.

Mr. Luther Allen, of the Globe Iron Works Co., will deliver an address Nov. 2nd, on "Shipbuilding" and the relation of the Republican party to that industry.

Capt. John Varner and Capt. P. Peterson, of Green Bay, were among the callers at THE RECORD office this week.

Work at the yards of the Cleveland Shipbuilding Co. is progressing finely on the two large freight steamers, and a small army of men is now engaged working full time. Work on the large triple expansion engines and boilers for the L. M. & L. S. T. Co. new passenger steamer building at the yards of the Chicago Ship Building Co. is also well along.

Vice-president John F. Pankhurst, of the Globe Iron Works Co., left for St. Paul, Wednesday, to consult with J. J. Hill, president of the Great Northern Railroad regarding an important equipment to the outfit of the two large steel passenger steamers now under contract at the Globe Yards.

A prominent ship owner of this port ridicules the sensational trash which has been published, and otherwise generally canvassed, anent the recent foundering of a lake steamer. He very pertinently called to mind the number of similar cases occurring almost daily on the ocean, and as being remarkable tonnage, he instanced the large Atlantic passenger steamer President, lost in 1841, the City of Glasgow, with 480 passengers, in 1854, the City of Boston in 1870, with 200 persons on board, and of 144 cargo steamers lost during a period of 40 years, no less than 24 were supposed to have foundered; at least there was none left to tell the tale, and the exact circumstances that contributed to their loss is still shrouded in mystery. That one such case should occur among the large lake fleet is not to be wondered at, and he characterized many of the recent statements, emanating from untechnical sources, as being simply for effect.

Capt. Ed Kelley has been appointed to the Ann Arbor No. 1, the large ice crusher built at Craig's yard, Toledo, to transport railroad cars across Lake Michigan between Frankfort and Kewaunee. These large wooden steamers, No. 1 and No. 2, are fitted with twin propelling screws, and one forward to assist in churning up the ice. The second boat will be launched in about a month, and winter communication will be kept open across the lake. Capt. Kelley has been kept busy on business for the line during the past two months, and is again enjoying excellent health, although the "grip" gave him a severe shaking up last winter.

Capt. Geo. P. McKay, treasurer of the Lake Carriers' Association, has had returned to him, and duly forwarded to Washington, numerously signed petitions from the several important lake ports, asking for the re-instatement of Col. Wm. Ludlow, as Inspector of the 9th and 11th Lighthouse districts. The Secretary of the Treasury and the Secretary of War will be pressed to arrive at a favorable conclusion for the Colonel in this matter.

Considerable trouble from grounding is being experienced at Lorain, O., three boats struck the bar at the mouth of the river this week and remained there for some time, fortunately there was no sea on.

General Manager John F. Parkhurst, of the Globe Iron Works Co., has received a letter from the Lighthouse Board expressing particular gratification with the lighthouse tenders Lilac and Columbine. The Board were so wll pleased that they decided not to deduct $8,000 forfeiture on account of delay in delivery, which was due to failure to receive the steel plates from the mills.

At a recent address the mayor of this city, quoting from Gen. Porter of the Census Bureau, stated "that Cleveland was the largest shipbuilding port in the United States, and the largest in the world, except in Clyde in England." What our worthy mayor was trying to get at is certainly hard to fathom, I suppose he is aware of the Clyde being a river in Scotland, and not a port in England, also that the banks of the Clyde are lined with shipyards at which 148 vessels might be constructed at one time, and that the number of men employed in the industry of shipbuilding during brisk times is about 60,000, which if multiplied by the usual factor guessed at by the census takers, would be found sufficient to populate a fair-sized hamlet. The mayor has evidently not "taken in" the stretch of vicinity between "the tail of the bank" at Greenock and the up river town of Glasgow, so of course may be excused from talking about the port of Clyde in England, however, for the edification of those who rave about the Clyde of the lakes, I find figures at hand showing that last month the Clyde shipyards put afloat twenty-five vessels, thirteen of which were steamers aggregating 20,260 net or register tons, and twelve sailing ships of 18,495 net tons. Further it might be argued that 27 shipyards employing 60,000 men might possibly turn out more ships in a given time than the two yards at this port could, at least there are lots of people interested in lake shipping who would be willing to admit the possibility. The Census Bureau is saddled with lots of queer statements lately, some of which are perhaps not intended to be construed literally, but taken *cum grano salis* as it were, but, this Clyde shipbuilding racket is about the worst deal of all.

NEWS FROM THE HEAD OF LAKE SUPERIOR.

Special Correspondence to The Marine Record.

DULUTH, MINN. The week has been a busy one in marine circles, and several events have taken place that have made Duluth marine men, as well as all interested in the town, to feel quite jubilant. In the first place, the lease has been closed of the large west end dock of Williams, Daugherty & Upham to the newly organized Pennsylvania & Ohio Coal Co., which is the consolidation of the Columbus, Shaunee & Hocking and other companies, and which will operate a very large independent coal business, with general headquarters in this city. The dock is 600x300 feet, and work began to-day in getting it ready for the superstructure, which is to be put up during the winter. The dredge firm making the lease has contracted with the coal company to increase the area of the dock by a space 200x300 each winter for three years, making a dock in three years that will be 1200x300 feet, and will have as large a coal capacity as any dock at the head of the lake with but one exception. The lease is for ten years, with privilege of renewal. The new coal company will build and buy a fleet of vessels to handle the coal, and as it now has its own coal lands and railways and docks, it will be a solid combination for the Philadelphia & Reading to fight. The company will probably put in a set of coke ovens at a later date. One of the most important things in connection with this deal will be that the company will have its headquarters here, thus necessitating the removal to Duluth of the headquarters of several coal companies now doing their business from St. Paul.

Wheat shipments of the past week have been about 1,500,000 bushels, and the stock in store to-day is 4,289,000 bush., an increase over a week ago of 635,000 bush. The stock in store a year ago was only 1,900,000 bush. Of to-day's stock 3,000,000 bush. are in elevators on this side the bay. Rates are now steady at 4 cents, and there is a good deal chartered ahead at that. Shipments of this week will be large, and a big share of the total will be carried, as has been particularly noticeable of late, by the whaleback fleet. These vessels are carrying at least half of all the wheat that is going out of this harbor to-day. Flour shipments keep up heavy, and will continue until the close of the season. There have been some good records made in this trade of late. The Gilbert is claimed to have taken out of the Imperial mill the past week a cargo of 28,350 bbls. of flour, which, if true, breaks the highest mark made hitherto. Local flour mills are now grinding about 7,000 bbls. of flour per week. There has been a slight cessation of lumber shipments this week, though the trade is still good. Vessels are said to be netting in this trade between Ashland and Chicago, about 40 per cent. this year. The run from Duluth to Buffalo is a little longer than the other, and the rate is the same, but big money is undoubtedly going to the owners of all craft in the business.

Talking of records, that was a nice speed that the Majestic has pinned up in the wheel-house. She made the round trip to Buffalo, wheat down and coal up, in nine days and eleven hours. The Neoshoto is out of dock and has taken a wheat cargo for Buffalo. Her place at the dock was at once taken, and the Briton is now waiting to get in. She struck bottom at the Sault, and has her after compartment full of water.

The government officer here has opened bids for the dredging of Grand Marais (Mich.) harbor, and the work will probably be done by Powell & Mitchell, of Marquette, at a cost of $34,680. This will include not only additional dredging but pier repairs. Capt. Barker will do the dredging in the harbor of Superior that is to be carried on at the expense of the property owners, if they can't get out of it. There are 451,000 yards at a bid of 21½ cents a yard. There has been a great legal kick by the property owners against this work, and if they can, by any possibility, knock it out, they will do so. These pier repairs are also ancient. Cannot some more permanent construction be devised, such as was spoken of in THE MARINE RECORD recently?

It seems that there is as yet no shipbuilding going on at the new Everett yard of the Pacific Steel Barge Co., though the keel will be laid for one ship of 5,000 tons in a short time. At the local yard of the company the two barges for the flour trade and the passenger steamer are all that are under way at present, but a good deal of work is planned for the winter. The Pacific Coast steamer will be 360 feet long, 42 feet beam and 26½ feet deep, and will be driven by 1,800 h. p. engines. She will have some cabin accommodations, and will be called the Everett.

The first cars of ore from the new Mesaba range were loaded last Saturday, an excursion party of old settlers of Duluth being at the Mountain Iron mine at the time. This ore is not what the Mesaba people care to brag about, as it is surface ore, but it is going at once to furnaces and will be fully tested. The mine owners do not know whether it will go Bessemer, and it would be astonishing if ore loaded from the surface of the ground with a steam shovel should, but they will send it where the furnace men know where it came from, and will not expect too much. The big blast furnace of the Duluth Furnace Co. will be started up in a few weeks on Mesaba ores, and will run out nearly 200 tons of pig daily. It will get its coke for the present direct from the Connellsville by all rail, but will next spring make arrangements to do the cooking here. The Lehigh Coal Co. has been furnishing the company with coke, but it was of such poor quality that it made trouble in the furnace and caused heavy additional expense.

The Duluth board of public works has decided to get to work on the ship canal tunnel project, and will very soon prepare a set of rough plans for the structure, on which bidders will be invited to make proposals, each bidder furnishing his own detailed plans and guaranteeing to give what is wanted. The property owners below the canal have mostly signed a round robin agreeing to pay three-quarters of the cost of the structure on assessment, and the rest will soon sign; in all probability, if they do not, the city will ask the courts for authority to assess. Any tunnel built there must have the top of its masonry at least twenty feet below low water mark, and the plans call for two railway tracks, and room for street railway, foot passengers and team travel. The estimate of cost so far made is $600,000, but this is undoubtedly too low. D. E. W.

DETROIT, MICH.

THE "ENRIGHT" WINS.

Special Correspondence to The Marine Record.

In the yacht race sailed on Lake St. Clair, Saturday the 15th, between the flyers Josephine, Princess and the Alice Enright, the last named won the race and took the purse of $1,000, the largest stake ever sailed for on the lakes by second class yachts. The Enright was built by Mr. Hepburn, now of the Davis Boat and Oar Co., of this city, and is, and always has been, a crack yacht in her class. The owners of the Princess have deposited $250 forfeit for another race, and challenged the Enright to single combat over same course. The Enright will no doubt respond at once.

The Detroit office of Beeson's Inland Marine Guide has been removed from the Government building to an up town location, 101 Griswold. This is the Wall Street of Detroit, and Mr. Beeson has nice quarters, very centrally located, where he may be found a all times when in the city.

The steamer Atlantic, of Grummond's line, will be cut down to light load line and rebuilt if her hull proves worthy, which is altogether likely. She is now at the lower dry dock awaiting the decis on of her owner. With new topsides and modern cabin, she will make a good addition to present passenger facilities. The Grummond line has enjoyed a good run of passenger traffic this season on all three boats of the line.

Capt. Alex. Ruelle is having built by the Detroit Dry Dock Co. a powerful tug 67 feet over all, 62 feet keel, 16½ feet beam and 10 feet, 8 inches depth of hold; engine 16 and 18, boiler 6½ by 12 feet, for 165 pounds steam. She will cost $15,000. The new tug is being built specially for work in the late fall and early spring, and is guaranteed to go on about her business through ice one foot thick. She is filled in solid for 12 feet aft of her stem and heavily ironed, so that she can place on station or bring to port in the fall, any lightships that are left out until the actual close of navigation. The Detroit Dry Dock Co. construct, engine and equip the boat ready for immediate service.

Capt. McLachlan, late of the steamer City of Detroit No. 1, is now in command of the Grand Haven & Milwaukee R. R. Co. steamer, City of Milwaukee, relieving Capt. Smallman, resigned on account of illness. Capt. McLachlan is well pleased with the Lake Michigan trade, and enjoys excellent health.

Mr. Alex. Smith, one of the proprietors of *Seaboard*, New York, spent a few days in the city last week in the interests of his publication.

The new steamer Wyandotte, with representatives of the Clark estate and of the Detroit Dry Dock Co., with a few invited guests, left the foot of Orleans street Wednesday morning on her trial trip. The requirements of the contract was that the boat should develop a speed of 17 miles an hour. The day was quite unfavorable for making fast time, a very fresh southwest wind prevailing. She steamed up around Belle Island and made her start from the Island lighthouse, running to Bois Blanc light, 22⅛ miles in one hour and 19½ minutes, or at the rate of 17½ miles an hour. The test was entirely satisfactory to the owners, and the boat was at once accepted. She will go on the river route Thursday.

THE WEEK'S BUFFALO MARINE.

Special Correspondence to The Marine Record.

BUFFALO, N. Y.—During the past week nearly 30,000,000 feet of lumber have arrived at Buffalo and Tonawanda, but otherwise the week has been unusually dull. Coal shipments for the month up to Tuesday night are nearly 300,000 tons, and if the present rate of business is kept up October will eclipse all records in this direction.

There continue to be reports of grain shortages. The Bielman was 601 bushels short, but 500 bushels of the shortage was afterwards found. The Aurora ran 406 bushels behind; the schooner J. I. Case had 1,600 bushels of wet flax seed, and the B. F. Bruce 800 bushels of wet flax seed.

The Erie Liner H. J. Jewett, reported rough weather on Lake Michigan and her forward deck houses suffered somewhat from the heavy seas.

Capt. James Galvin, the outside agent of the Mills Dry Dock Company, has bought the old barge, Dan Rogers, the Captain is said to have made a good bargain.

Captain McCartney, who owns part of the schooner C. H. Burton, waxed exceeding wroth at the delay his boat encountered while unloading a cargo of 480 tons of pig iron at the Erie docks in the Ohio basin, so he attached the cargo after it was discharged on the dock, for a demurrage claim of $300. The Burton was delayed nearly a week.

The contract for Hurd & Hauenstein's new steam barge has finally been awarded to Anderson, of Marine City. Some changes were made upon the original plan, which will make the steamer 190 feet keel, 205 feet over all, 35 feet beam and 13 feet deep.

The steamer China ran out of her course in the fog last Thursday and got aground between Windmill Point and Roses Reef. A tug released her. The same morning the Oscar T. Flint went on the beach at Stony Point. It took two tugs to pull her off.

The steam canal boat Haines cleared for West Troy last week with a cargo of 200 tons of copper, valued at about $60,000. This is the first cargo of the kind shipped by canal within the memory of the present canal officials.

The forwarders of east-bound freight are mostly in a bad way from scarcity of cars and canal boats. So many of the latter jumped at four cent wheat, that they are now at the other end of the route. The Erie & Lackawanna have been receiving no through grain at Chicago for some time, and are perhaps in better shape than the other companies. The situation is serious, and some vessel men predict another jam like the one late last fall.

Coal freights to Lake Michigan advanced last Saturday to 75 cents to Chicago and 70 cents to Milwaukee. At this writing freights are strong at the advance, with shippers taking all the tonnage they can get. The Lehigh Line boats load at 60 cents by especial arrangement.

The Buffalo Harbor Tug Pilots' Association are already making arrangements for their first annual ball, which will be held in Thespian Hall some time in January. This same Thespian Hall was formerly the Church of the Messiah, and is now run by Sloan & Cowles, the well-known shipbuilders and owners of excursion steamers, as a dance hall and dancing school.

David Bell, speaking of the Canal Convention, said his idea of improving that water-way would be to widen the locks. Now boats of greater than 17 or 18 feet beam cannot get through. Mr. Bell argues that if they were widened to 25 or 30 feet it would pay to build light draft steel steamers which could carry 25,000 bushels of grain and take care of themselves all the way to New York. The trip would be much shortened and the canal made a much more formidable rival of the railroads by this plan, and the cost of the improvement would be trifling compared to the amount necessary to follow out some of the schemes talked of.

The arrival of the E. C. Pope here with the record cargo of the lakes from Chicago, 120,000 bushels of wheat on a 15 feet, 11 inches mean draft, is awaited with interest by newspaper and vesselmen.

The schooner Southwest poked her bowsprit over into the yard of the life-saving station the other day and tore a small tree up by the roots. The tree remained on the bowsprit until a tug got a line to it and hauled it off. P.

THE WEEKLY CHICAGO GRIST.

CHICAGO, ILL.—The owners of the schooner Richard Mott have commenced proceedings against the city of Chicago and the Independent Tug Co. for $2,000, for damage done by collision with Jackson Street bridge, last month, when the schooner's jibboom, bowsprit, head gear and fore and main masts were carried away.

The U. S. Michigan and revenue cutters Andy Johnson and Fessenden are in port and will take part in the naval demonstration at the dedication of the World's Columbian Exposition, on the 21st inst.

Xaver Thiéler, second engineer of the tug Art Carpenter, fell overboard and was drowned Monday, at midnight. The tug was just inside the water works crib at the time, towing the schooner Winslow into port. The body was not recovered. The deceased was a single man.

The lighthouse tender Amaranth, captain, L. M. Stoddard, was in port last week, coaling up and getting in a stock of provisions. The steamer has paid a visit to the lighthouses on the east shore of Lake Michigan and will visit those on the west shore. The Amaranth was built by the Cleveland Ship Building Co. She is of steel, and is a very handsome, well-equipped steamer.

Henry Bloecker, of Grand Haven, arrived here Thursday morning via. South Haven, where he is putting the machinery into the new steamer City of Kalamazoo. He is building three high-pressure marine engines, 7x7, for the Burbeck Lumber Co., Louisiana, and one 13x14 for Obecke & Co., Grand Haven, for a fishing tug, building by the Grand Haven Ship Building Co.

The launching of the H. W. Williams Transportation Line's new passenger propeller, to be christened the City of Kalamazoo, will take place Saturday afternoon, October 22nd, at 3 o'clock. The new steamer has been built by Capt. John B. Martel. Her dimensions are 176 feet over all, 31 feet 6 inches beam, 12 feet depth of hold; engine, high pressure, 26x30, with independent condensor built by Henry Bloecker, Grand Haven; Scotch type boiler, 11x11, allowed 150 pounds steam pressure, built by Johnston Bros., Ferrysburg and Chicago.

WILLIAMS.

LAKE TONNAGE NOW UNDER CONSTRUCTION.

A summary of the new tonnage recently contracted for, and now under construction, or equipment at lake shipyards, is given herewith, The tonnage has in a few instances been estimated, as also the cost, but in all cases the reports are those furnished by the builders and estimates have only been made where these particulars were omitted. We also take this means of presenting our thanks for the prompt attention and courtesy received at the hands of the builders in furnishing THE RECORD with their latest *bona fide* contracts.

BUILDERS.	NAME OR NO.	TONS.	TYPE.	OWNERS.	COST.	WHEN COMPLETED.
Am. Steel Barge Co.	Barge No. 126	1,111	Steel Tow-Barge	Am. Steel Barge Co.	$90,000	Nov. 15, 1892
Am. Steel Barge Co.	Barge No. 127	1,111	Steel Tow-Barge	Am. Steel Barge Co.	90,000	Nov. 1, 1892
Am. Steel Barge Co.	J. B. Colgate	1,318	Screw Steamer	Am. Steel Barge Co.	140,000	Oct. 15, 1892
Am. Steel Barge Co.	No. 128	1,500	Screw Pass. st'r.	Col'b'n Wh'b'k S. S.Co.	240,000	May 1, 1893
David Bell	Calumet	——	Revenue Cutter	U. S. Government	38,500	May 1, 1893
Chicago Shipbuild'g Co.	Tho. Maytham	2,400	Screw Freight st'r.	Drake et. al.	160,000	Nov. 1892
Chicago Shipbuild'g Co.	Arthur Orr	2,400	Screw Freight st'r.	Elphicke & Co.	160,000	April, 1893
Chicago Shipbuild'g Co.	No. 8	2,800	Screw Pass. st'r.	L. M. & L. S. T. Co.	300,000	June, 1893
Clevel'd Shipbuild'g Co.	No. 18	2,565	Screw Freight st'r.	Builder's Account	190,000	O'g Nav. 1893
Clevel'd Shipbuild'g Co.	No. 19	2,565	Screw Freight st'r.	M. A. Bradley, et. al.	200,000	O'g Nav. 1893
Craig Shipbuilding Co.	Ann Arb. No. 1	1,800	R. R. Ferry st'mer.	T. A. A. & N. M. R. R.	190,000	Oct'b'r, 1892
Craig Shipbuilding Co.	Ann Arb. No. 2	1,800	R. R. Ferry st'mer.	T. A. A. & N. M. R. R.	190,000	Decem., 1892
James Davidson	No. 51	95	Tug-boat	Builder's Account	20,000	Oct'b'r, 1892
James Davidson	No. 52	2,200	Schooner	Builder's Account	60,000	Oct'b'r, 1892
James Davidson	No. 53	2,200	Schooner	Builder's Account	60,000	Novem., 1892
James Davidson	No. 54	2,200	Schooner	Builder's Account	60,000	Jan'ry, 1893
James Davidson	No. 55	2,200	Schooner	Builder's Account	60,000	April, 1893
Detroit Dry Dock Co.	Wyandotte	800	Screw Pass. st'r.	Clark Estate	75,000	Oct'b'r, 1892
Detroit Dry Dock Co.	No. 112	1,200	Screw R.R.F'y st'r.	Mackinac Trans. Co.	325,000	Early in 1893
Detroit Dry Dock Co.	No. 113	3,600	Screw Freight st'r.	Eddy Bros. & Co.	225,000	Early in 1893
Detroit Dry Dock Co.	No. 114	2,000	Side wh. Pass. st'r.	D. & C. Navigation Co.	300,000	Early in 1893
Detroit Dry Dock Co.	No. 115	3,000	Screw Freight st'r.	N. Y. C. R. R.	225,000	O'g Nav. 1893
Detroit Dry Dock Co.	No. 116	2,000	Side wh. Pass. st'r.	D. & C. Navigation Co.	300,000	O'g Nav. 1893
Detroit Dry Dock Co.	No. 117	280	Tug-boat	Alex Ruelle	15,000	O'g Nav. 1893
Freeman Bros.	Keewaydin	15	Sail Yacht	Marquette Y. C.	3,000	O'g Nav. 1893
Globe Iron Works Co.	No. 50	4,000	Twin scr. Pas. st'r.	J. J. Hill	550,000	O'g Nav. 1894
Globe Iron Works Co.	No. 51	4,000	Twin scr. Pas. st'r.	J. J. Hill	550,000	O'g Nav. 1894
Globe Iron Works Co.	No. 52	1,800	Screw Freight st'r.	Wallace, et. al.	160,000	O'g Nav. 1893
F. W. Kirby	No. 50	45	Steamer	Builder's Account	12,500	Nov., 1892
F. W. Wheeler & Co.	No. 93	3,500	Screw Freight st'r.	Mitchell Trans. Co.	225,000	April, 1893
F. W. Wheeler & Co.	No. 94	4,000	Screw Freight st'r.	Hawgood & Avery	240,000	April, 1893
F. W. Wheeler & Co.	No. 95	4,000	Screw Freight st'r.	D. C. Whitney	240,000	April, 1893
F. W. Wheeler & Co.	No. 96	2,500	Schooner	Colin McLachlin, et.al.	75,000	April, 1893
F. W. Wheeler & Co.	No. 97	24,00	Screw Freight st'r.	Hawgood & Canfield.	130,000	April, 1893

The tonnage contained in the foregoing table represents high-classed twin screw steel passenger steamers; side-wheel passenger steamers; double-ended, twin screw steamers for transporting loaded railroad cars across Lake Michigan, and the Straits of Mackinac throughout the winter months, thus making them formidable ice-crushers, a fleet of the "whaleback" type, both steam and tow, steel freight steamers of 4,000-ton capacity, and also wooden schooners.

The totals found from the table are 34 vessels, of 69,105 tons, at a valuation of $5,899,000. In addition to these contracts others have been talked of, and are likely to be placed any day, though "still in the air," as it were; for instance, the Craig Shipbuilding Co., of Toledo, O., is credited with having secured the contract to build two new steamers for the Lake Erie Transportation Co., at a cost of about $175,000 each. The Union Dry Dock Co., of Buffalo, has also been mentioned in connection with the building of two large modern steel freight steamers for the Union Steamboat Co., at a cost of about $200,000 each, and the Central Vermont R. R. Line, it has also been stated, intended to add to their fine wooden fleet, three steel freight steamers, to be constructed by the Detroit Dry Dock Dock Co., this latter contract, however, has been authoritatively denied by the ship building firm, and providing that the Central Vermont has postponed the letting of their contract, it is generally admitted that new tonnage will soon be added to their line, these boats should cost about $200,000 each. Hubbell & Co., of Buffalo, are also mentioned as receiving specifications from Rieboldt, Wolter & Co., of Sheboygan, for a large steam lumber carrier, whose probable cost would be at least $130,000, and there are several minor contracts talked of at the various ports, some of which will no doubt be closed at an early date.

The tonnage in sight, according to the foregoing, aggregates a total of eight steamers, at a cost of $1,480,000, which amount if added to the tonnage now contracted for, shows a grand total of 42 vessels, amounting to $7,379,000, as their estimated cost. The several Canadian contracts would certainly amount to another million dollars, the most notable of which are a large steel freight steamer for Thos. Marks & Co., of Port Arthur, and the new fishery cruiser now building at the yards of the Polson Iron Works, Owen Sound, at a cost of $45,000, and to be completed December 1st, 1892. In addition to the foregoing, Hurd & Hauenstein, of Buffalo has awarded a contract to Anderson of Marine City, for a steambarge, 190 feet keel, 35 feet beam and 13 feet deep. The boat is to be finished by the first of May, but Mr. Hurd declines to state the price of the new steamer. A new passenger steamer of 176 feet over all, built by Capt. John B. Martel on Lake Michigan, to the order of H. W. Williams Transportation Line to be named the City of Kalamazoo, will be launched on Saturday next, but approximate figures are also wanted on this tonnage.

THE EIGHT HOUR BILL.

The provisions of the eight hour bill state that it shall be unlawful for any government officer or any contractor or sub-contractor to require any laborers or mechanics to work more than eight hours, in any calendar day, except in case of extraordinary emergency. For violation of this law a penalty is provided, not to exceed a fine of $1,000, or six months' imprisonment, or both. Mr. Tarsney, of Missouri, introduced this bill in lieu of one that had been on the statutes without provisions for enforcing it, for upward of 20 years.

CAPPED THE RECORD TO THE WESTWARD.

The log of the City of Paris, which arrived at New York early Wednesday morning, shows the passage from Queenstown to have been made in five days, fourteen hours and twenty-four minutes, the distance traversed being 2,782 miles. The day's runs were 448, 508, 503, 505, 530 and 288. This beats the record for a westward passage. The record up to this voyage was five days fifteen hours fifty-eight minutes, held by the City of Paris.

The City of Paris' previous record was on July 27th last. This record is now beaten by one hour and thirty-four minutes. Her average daily run this trip was over 500 miles and her greatest run 530 miles.

WHY IS FORT WILLIAM BLOCKADED?

Special Correspondence to The Marine Record.

PORT ARTHUR, ONT.—Why the Canadian Government should place an embargo on the commerce of these ports I can't imagine. Here is our neighboring port at the mouth of the Kaministiqua River, and to which vessels are chartered, left under the blockade of an impassable bar when a small investment for dredging would overcome the difficulty altogether. Within the past two weeks the large schooner Alva Bradley grounded and stopped navigation, then comes along the C. P. R. steamer Manitoba and laid alongside of her, and completely blocked all ingress or egress to Fort William for twenty hours. Two tugs and considerable lightering eventually raised the blockade, but the same difficulty is liable to be experienced at any time. H.N.

CORRESPONDENCE.

☞We do not hold ourselves responsible in any way for the views or opinions expressed by our correspondents. It is our desire that all sides of any question affecting the interests or welfare of the lake marine should be fairly represented in THE MARINE RECORD.

WHEN WAS THE ALPENA LOST?

CHICAGO, ILLS., Sept. 19, 1892.

To the Editor of The Marine Record:

Will you have the kindness to settle a controversy by stating in the columns of THE MARINE RECORD the particulars and year in which the Goodrich Line steamer Alpena was lost? I hold that she was lost eleven years ago, and my friend says eight years. Who is correct? I would further desire you to state why the wages of captains are not published in your paper with the engineers and rest of the crew, or are the figures "out of sight."

JAMES A. MACAULEY.

The following account of the loss of the Alpena places her loss just twelve years ago and being from a reliable and official source can be accepted as final:

October 16th, 1880. The passenger steamer Alpena, Capt. W. W. Napier, foundered on Lake Michigan and all on board were lost, consisting of some sixty souls. The steamer left Grand Haven for Chicago the evening before, about an hour and a quarter after her schedule time, and was met by the steamer Muskegon at about 1 o'clock a. m. on her usual route, so that it is supposed she was well on her way to Chicago when the tornado of that date struck her, which must have been about 5 o'clock a. m. She was seen by the barge Irish soon after daylight and again about 9 or 10 a. m. by the schooner Holmes. The last time seen, she was headed west and in the trough of the sea blowing a whistle of distress. After this there were no further tidings of her until her wreckage came ashore, near Holland on Monday or Tuesday, the 18th or 19th. Eight bodies were recovered and identified as victims of the wreck. The Alpena was the only steamer known to have faced the storm for any length of time, and she was the only one lost on Lake Michigan during the severe tornado of the 16th of October, 1880.

In the matter of publication of masters' wages, the compensation is usually arranged for individually, and no schedule has ever been compiled, although a number of owners have stated season salaries for their different classes of tonnage, yet, the circumstances are such that it would be difficult to class the tonnage for graded salaries. This follows a seemingly universal custom, in so far as masters wages are concerned, and our correspondent is no doubt aware of at least several reasons for the prevalence and continuance of the usage. [ED.]

DEMURRAGE.

TORONTO, ONT., Oct. 18, 1892.

To the Editor of The Marine Record:

Where there is no mention made in a bill of lading regarding demurrage, is it collectible, and is the vessel entitled to the same amount she has previously received for demurrage. J. H. P.

Where the bill of lading contains no stipulation as to demurrage, it has been held in the common law courts that the consignee is not liable, so that if you were to enter an action there, you probably lose it, the admiralty courts are more equitable in this particular and have ruled that the master had a lien upon the cargo, although demurrage was not specified in the bill of lading. Whether it is "collectible" or not rests a great deal with the principals, though it is always preferable to close a charge of this sort up with all possible dispatch. Some ports are more expensive than others, and no arbitrary sum can be placed as a positive figure, a safe limit, however, should always be allowed for demurrage charges. [ED].

TO SECURE A NEW REGISTER.

MILWAUKEE, WIS., Oct. 18, 1892.

To the Editor of The Marine Record.

I am under a slight difficulty regarding the certificate papers of a certain vessel. To the best of my belief this document was either burned in a fire that occurred on board, or has been maliciously made away with by a person who had access to the place where it was kept. I would thank you to advise me through the columns of THE MARINE RECORD what steps must be taken to protect the vessel and her ownership, and if I can procure a new set of papers. Yours truly,

A SUBSCRIBER.

Certificates of registry are required for vessels engaged in the foreign trade and are permitted to such vessels as are engaged in the coasting trade where the requirements of entering at a custom house is compulsory. Vessels, however, engaged in the domestic trade between ports and places on Lake Michigan exclusively, laden with American productions and free merchandise, may unload without obtaining a permit. Certificates of register are of two descriptions, permanent and temporary; the first is granted by the collector at the vessel's home port, and the latter by the collector of any other district. It is only necessary to make an affidavit to the effect that the vessel's register has been lost, destroyed or mislaid, and the collector will issue another one either temporary or permanent, according to the district in which application is made. The penalty for neglecting to obtain a new register is the forfeiture of all privileges and benefits of nationality, and the vessel is liable to be seized by a United States vessel of the Revenue Marine, if found without a register. For failure to surrender an old certificate of registry, if a new one has been issued, the owner is liable to a fine of $500. [ED].

MARITIME LAW.

GENERAL AVERAGE—VOLUNTARY STRANDING—SAVING OF LIFE.

Where the master of a vessel, which was dragging her anchor in a gale and in danger of going ashore, slipped the cable, and voluntarily stranded her, in substantially the same place, under the same conditions, and with the same result to her cargo as must necessarily have soon resulted from her dragging anchor, held no case of general average. 47 Fed. Rep. 125 affirmed. In admiralty. Appeal from a decree of the District Court of the United States for the Southern District of New York, dismissing the libel of the libelant. Affirmed.

NEGLIGENCE IN LEAVING OPEN HOLE IN DECK.

To leave a small trimming hole in the lower deck of a vessel, a short distance from the main hatch, open and unguarded, when the vessel was unloading and the between decks, where it was to be expected the stevedores discharging the cargo would necessarily go, was dark and unlighted, is negligence for which the ship is liable. A stevedore engaged in unloading a vessel, went between decks to get his overalls and change his clothes preparatory to going to work in the lower hold. The between decks were dark, and he fell through a "feeding hole." It was the ship's duty to keep the "feeding hole" closed. He was justified in believing the hole closed, and was not guilty of contributory negligence. A vessel is responsible for an injury happening to a shoveler employed by the stevedore, that she employed to unload the vessel, when such injury occurs through her own unsafe condition. The Protos, United States Circuit Court, Pennsylvania, 38 Fed. Rep., 919.

Circuit Court of Appeals, Second Circuit. December 14, 1891.

NOTICE TO MARINERS.

(NO. 95, of 1892.

UNITED STATES OF AMERICA—NORTHERN AND NORTHWESTERN LAKES—ST. MARY'S RIVER LIGHTS.

ROUND ISLAND LIGHT.—Notice is hereby given that, on the night of September 20, 1892, a fixed white lens-lantern light with two fixed red sectors was exhibited from the structure recently erected on the east side of Round island, St. Mary's river, Michigan.

The white sector lies between and is bounded radially by the two red sectors, and illuminates 180° of the horizon, extending from N. ⅛ E. (N. 1° E.) through eastward to S. ⅜ W. (S. 1° W.) The southerly red sector covers, and its easterly edge guides clear of the shoals to the southward and westward of Round island.

The focal plane of the light is 40 feet above lake level, and the light may be seen in clear weather about 4 miles.

The light is shown from a small hexagonal black iron lantern surmounting a square wooden tower, 35 feet high from base to focal plane, rising in the front of a one and one-half story frame dwelling. The tower and dwelling are painted buff with white trimmings, roof red, and have a background of trees about 90 feet high.

The approximate geographical position of the lighthouse, as taken from chart No. 4, Straits of Mackinac, U. S. Survey of the Northern and Northwestern Lakes, is: Latitude, North, 46° 06′ (26″); Longitude, West, 84° 01′ (16″).

Bearings and distances of prominent objects are: Hay Point, N. W. tangent, N. E. ¾ N. (N. 37° 10′ E.), 1⅜ miles. Lime Island, W. tangent, S. by E. ⅜ E. (S. 15° 50′ E.) 1⅜ miles. Pointe aux Frenes, N. by W. (N. 11° 30′ W.) 1⅜ miles.

Bearings relating to the edges of the sectors are from seaward. All bearings are true and given approximately; distances, in statute miles.

By order of the Lighthouse Board: James A. Greer, Rear-Admiral U. S. Navy, Chairman.

Office of the Lighthouse Board, Washington, D. C. Oct. 11, 1892.

OLD MACKINAC POINT LIGHT.—Notice is hereby given that on or about October 25, 1892, a light of the 4th order showing a red flash every 10 seconds will be exhibited from the structure recently erected on the site adjoining the fog signal on Old Mackinac Point, S. side of the Straits of Mackinac, Mich.

The light will be visible from N. 51° W. (N. W. ½ W.) through northward to S. 87° E. (E. ¼ S.) The remaining portion of the arc is secured by the land.

The focal plane of the light is 60 feet above lake level, and the light may be seen in clear weather, the observer's eye 15 feet above lake level, 15¼ miles.

The light will be shown from a black lantern surmounting a cylindrical buff-brick tower, 50 feet high from base to focal plane, forming the N. W. corner of the keeper dwelling. The keeper's dwelling is of buff brick, has bright red roofs and the front facing the Straits is castelated. It stands about 90 feet to the westward and a little in rear of the fog-signal building.

The approximate geographical position of the lighthouse, as taken from chart No. 4 Straits of Mackinac, Survey of the Northern and Northwestern Lakes, is: Latitude, North, 45° 47′ (18″). Longitude, West, 84° 43′ (40″).

Bearings and distances of prominent objects are: Cheboygan Light-House, S. 62° E. (S. E. by E. ½ E.), 16⅞ miles. McGulpin Point Light-House, S. 98° 30′ W, (W. ⅛ S.), 2⅛ miles. St. Helena Light-House, N. 55° W. (N. W. ⅞ W.), 8 miles.

All bearings are true and given approximately; bearings relating to the visibility of the light are from seaward; distances in statute miles.

By order of the Light-House Board: James A. Greer, Rear Admiral, U. S. Navy, Chairman.

Office of the Lighthouse Board, Washington, D. C. Oct. 15 1892.

A SHIPMASTER'S RESPONSIBILITY.

A contention which we have long supported regarding the duties and responsibility of shipmasters is embodied in the following article from the London *Nautical Magazine:*

"A doctor may mistake the malady he is treating a patient for, and discover his mistake when the *post-mortem* takes place; a lawyer by carelessness may lose his client's case, and entail an endless loss of money; a civil engineer may plan and construct a railway viaduct, which blows down and kill lots of people travelling in a crossing train, but these men are members respectively of a *profession!* and having time to perfect and elaborate their plans and arrangements, are duly licensed to squander or kill, if it is discovered too late they have made a fatal mistake. These men have time to think, to consult if in doubt, to look up books of bygone cases, to reverify strains, etc.; and in consequence, if they make a mistake, are sympathized with in every direction by their friends. Is it so with the shipmaster? No! He habitually sleeps with the care on his hands of property as large as any heretofore mentioned as belonging to the learned professions; in addition, he has the *personal* care of the property itself, and if *momentarily* he is called upon to decide upon a course of action and makes a mistake, this one lapse of judgment is a stumbling-block in his path forever. This is no exaggeration; the keenest intellects in England may be seen any day engaged in trying maritime cases which had to be decided momentarily by the man on the bridge. Every point will be argued *pro* and *con.*, but not the smallest regard will be paid to the initial cause of the disaster, *i. e.*, the man on the bridge. Turn him out; he is the mere cause; the effect is that which is appreciated by both counsel and solicitors."

PROPOSALS.

U. S. ENGINEER OFFICE, 121 Franklin Street, Buffalo, N. Y., October 15, 1892. Sealed proposals for extension of breakwater and for building 1600 feet of the shore arm at Buffalo, N. Y. will be received at this office until 2 p. m. November 15, 1892, and then publicly opened. Specifications, blank forms and all available information will be furnished on application to this office MAJOR E. H. RUFFNER, Corps of Engineers. 13-3

U. S. ENGINEER OFFICE, 121 Franklin street, Buffalo, N. Y., Oct. 15th, 1892. Sealed proposals for hire of dredge, drill boat, tug, derrick scow and for excavation of material in the Niagara River, N. Y., will be received at this office until 2 p. m., November 15th, 1892, and then publicly opened. Specifications, blank forms and all available information will be furnished on application to this office. MAJOR E. H. RUFFNER, Corps of Engineers. 13-3.

U. S. ENGINEER OFFICE, HICKOX Building, 185 Euclid avenue, Cleveland, O., September 30, 1892. Sealed proposals for extension of breakwater at Cleveland Harbor, Ohio, will be received at this office until 2 o'clock, P. M., of Thursday, October 20th, 1892, and then publicly opened. Specifications, blank forms and all available information will be furnished on application to this office. JARED A. SMITH, Lieut. Col., Corps of Engineers, U. S. A. 13-20

U. S. ENGINEER OFFICE, HICKOX Building, 185 Euclid avenue, Cleveland, O., September 30, 1892. Sealed proposals for removal and rebuilding of piers at Ashtabula Harbor, Ohio, will be received at this office until 2 o'clock, P. M., of Thursday, October 20, 1892, and then publicly opened. Specifications, blank forms and all available information will be furnished on application to this office. JARED A. SMITH, Lieut. Col., Corps of Engineers, U. S. A. 13-20

JEFFERSONVILLE, IND., OCTOber 1, 1892. Sealed proposals, in triplicate, will be received here until 11 o'clock a. m., (central standard time) Tuesday, the 1st day of November, 1892, for furnishing at the Q. M. Depot here 100,000 gallons of Mineral Oil, of 135° flash test, in cases of two five-gallon cans each. Government reserves right to reject any or all proposals, and to accept the whole quantity or any portion of the mineral oil bid for. All information furnished on application here. Envelopes containing proposals should be marked "Proposals for Mineral Oil," and addressed to COL. HENRY C. HODGES, Assistant Quartermaster General, U. S. Army, Depot Quartermaster.

A PAPER ON THE INDUSTRY OF THE GREAT LAKES.

Hon. George H. Ely, delegate from the American Society of Civil Engineers to the fifth international congress on inland navigation, held at Paris, repeated his address on "The Great Lakes of North America" to a large audience at the Board of Trade rooms, in Cleveland, O., last week.

There is not another man in the entire lake district so eminently qualified to deal with the subjects contained in the address as is the originator thereof, and a brief synopsis of the valuable data contained in the paper is recorded herewith:

"Cartier, the Frenchman, entered the mouth of the St. Lawrence in May, 1535.

"There, his anchor went down in waters, that had reached the sea from the heart of the continent 2,500 miles distant.

"India and 'Far Cathay' had, for a century, kindled the imagination of all Europe. Explorers from Britain, France and Spain, and the Norsemen, earlier than they, had sailed into the West, to reach those sunny lands of the East, so opulent in harvests, in gold and silver, and in precious stones. They never found Cathay. The way was barred by an unknown continent.

"The Cabots, Columbus and Amerigo Vespucii landed on its fringing islands and coasted along its wilderness shores, but until Cartier, only De Soto, in search of the fountain of perpetual youth, penetrated to its interior, there to die and receive sepulture in the waters that, like those of the St. Lawrence, rolled to the sea from the central fountains of the continent.

"The French, then—Champlain following Cartier—ascending the St. Lawrence and breaking the silence of the wilderness along the shores of the great North American Lakes, led the way to permanent occupation. They first explored that vast interior domain, destined to be the home of thronging millions, and the seat of an opulence richer than all the dreams of Cathay. The missionary, the fur trader and the soldier carried the flag of France, through all the Lakes to the end of the chain in the far north-west; thence also down the Ohio, Missouri and the Mississippi, to the Spanish occupation at the Gulf.

"France held these outposts of civilization on the line of the Saint Lawrence system, over two hundred years. She meant it to be, and called the new continent "New France." By the treaty of Paris, however, in 1763, she 'ceded and guranteed Canada with all its dependances' to Great Britain. It is not fitting upon this occasion for me to discuss the consequences of this momentous cession of half a continent; but it may not be amiss for us to observe the compensation of events which time hath wrought. If this territory had never been ceded by France, both ranks of this continental system would have been occupied by nations with republican institutions; as it is, both banks are occupied by nations speaking the same language, thus in every great historical loss, Destiny preserves some salvage for mankind.

"The names and the influence, however, of these pioneers of faith and civilization, survived all change of rule and flag. The memories of Marquette, Duluth Joliet, Hennepin and La Salle have been perpetuated in the names of villages, cities and military posts of the Great Republic. For about one-half the distance across the continent the waters of the St. Lawrence system divide the Dominion from the Great Republic. The boundry line, beginning on the St. Lawrence in latitude 45°, passes through the middle of Lake Ontario, Erie, St. Clair, Huron, the St. Mary's river and Lake Superior, to a point on its north shore, 124 miles east of Duluth and Superior, the western end of Lake Superior. Lake Michigan is wholly within the territory of the United States.

"These great American lakes contain more than one half of the area of all the fresh water of the globe. They make up the largest system of deep water inland navigation on the globe. The water area is 95,460 square miles. The drainage area is 150,000 square miles. No other inland waterway bears upon its bosom so vast a commerce, or touches, as this does, the vital interests of so many million of men. The topographical relations of these connected waters are very remarkable. Lying, in general direction, east and west, between the 41st and 47th parallels, they penetrate from tide water on the St. Lawrence (and including the Erie canal), from tide water at New York, 1,400 miles into the heart of the continent. The head of Lake Superior and the St. Lawrence tidewater are on the northernmost parallel, Chicago and New York on the southern. The western extremity of the system, the head of Lake Superior, is 1,700 miles only from the waters of the Pacific. It is 2,384 miles from Belle Isle, at the mouth of the St. Lawrence, and 4,618 miles from Liverpool." The tonnage, he said, moving on the lakes originates in a very large proportion on the soil of the United States. Eight of the states of the Union border directly on them, while beyond the head of Lake Superior are 600,000 square miles more of American territory, and north of this is another like empire under the British flag. The mineral treasures first drew the explorer up the St. Mary's river, said Mr. Ely, Lake Superior being then unknown except by the missionary and the fur trader. Continuing, he said:

"The descent in the St. Mary's river—75 miles long—is 20 feet 4 inches; 18 feet 2 inches of this is at Sault. Two feet two inches are distributed over the first 35 miles below the Sault. Lake Superior was opened by the completion of the canal and first lock in 1855. This passed vessels drawing a maximum of 11½ feet water. This was superseded in 1881 by the lock now in use—515 feet long, 80 feet wide and 17 feet water on the miter sill. From that time this lock has with wonderful efficiency met the demands of a rapidly increasing tonnage. In 1882, it passed 2,029,000 tons; in 1883, 2,267,000; in 1884, 2,874,000; in 1885, 3,256,000; in 1886, 4,527,000; in 1887, 5,494,000; in 1888, 6,932,000; in 1889, 7,516,000; in 1890, 9,041,213 tons, the average season of navigation in that latitude being about 220 days. The total number of passages in 1890 was 10,557. The average number passing per day was 45.3. The average registered tonnage per vessel in 1887 was 626.3; in 1891 it was 862.1. The annual average net tonnage for the last five years of the Suez canal—a world's channel of commerce, and open every day in the year—was 6,983,167 tons. The annual average net tonnage of the lock and canal at Sault Ste. Marie for the same period—open only an average of 220 days in the year—was 6,821,062 tons.

Congress has begun appropriations for the removal of obstructions at six different localities along the line. The estimates for this work are $3,394,835, and twenty feet of water will be secured at each of these localities contemporaneously with the completion of the works at the Sault in 1896.

The registered tonnage of the lakes June 30, 1891, was 1,154,870 tons; 1,592 steam vessels, representing 736,751 tons, and 2,008 sail, 418,118 tons. The tonnage has more than doubled in the last five years, the increase being almost exclusively in steel steamships of 1,500 to 2,500 tons register. The ship building plants of the port of Cleveland alone launched 71,322 registered tons in the years 1889-1890. As a ship building locality, Cleveland has already become second only to the Clyde. During the fiscal year ending June 30, 1892, 64 vessels, representing 83,223 net registered tons, mainly steel steamships, have been added to the lake fleet, at a cost of $7,911,000. Of the total United States tonnage launched in 1889, 46 per cent. was on the Great Lakes, 41 per cent. on the Atlantic coast, 8 per cent. on the Pacific coast, 5 per cent. on the western rivers.

"The capacity and power of some of our latest constructions are illustrated by the sister steel steamships Maritana and Mariposa, just put afloat for the Minnesota Steamship Co. The former was launched by the Chicago Ship Building Co. June 8, 1892, and the latter by the Globe Iron Works Co., Cleveland, June 16. The dimensions of these boats are: Length of keel, 330 feet: length over all, 350 feet; breadth of beam, 45 feet; depth of hold, 24½ feet. The engines are triple expansion, 24, 39 and 63 inches, with 48 inches stroke, steam being furnished from three steel boilers 12 feet in diameter by 12½ feet long. These ships are guaranteed to carry 3,000 gross tons on the present draft of water, 14½ feet, and 4,000 gross tons on 17 feet. The 20 feet of water expected in 1896 will, of course, correspondingly increase the carrying capacity of these ships.

"The work of this lake shipping is given approximately by the United States census report of 1890. The freight movement in 1890 on all the lakes was estimated by that report at 53,424,432 tons. The tonnage put afloat since then has increased this movement to 63,240,514 tons. Estimates only can be given, because at one point only on the lakes, Sault Ste. Marie, is there an official record made of tonnage movement. The movement through the Detroit river alone in 1889 was estimated at 36,203,586 tons. The grain movement alone in the season of 1891, from the Lake Superior ports, Duluth and West Superior, and from Chicago, Milwaukee, Toledo and Detroit, was 197,165,208 bushels. The average lake freight for the last three years on wheat from Chicago to Buffalo has been 1.73 cents per bushel. From Chicago to New York, by the lakes and the Erie canal, 6.87 cents. The all rail rate average from Chicago to New York for the last three years has been 14.76 cents per bushel."

"We are now the largest producers of pig iron, Bessemer steel ingots and Bessemer steel rails in the world. We consumed in the United States in 1890, 17,500,000 tons of iron ore. Of this, 1,246,830 tons were imported; 16,253,170 tons were home production. Of the home production, Lake Superior region furnished 9,003,701 tons. Out of the northwest, then, over these lakes, come more than one-half the ores for the vast iron and steel industries of our country. They are distributed, mainly, through Ohio, Pennsylvania, West Virginia, New York and Illinois."

About 100 mining locations are now in operation in the Lake Superior districts. The Marquette district was opened in 1855; the Menominee in 1878; the Gogebic and the Minnesota in 1884. The total production since 1855 (1891 inclusive) has been 65,462,737 gross tons. The magnitude of the investments in Lake Superior ore mining and in its distribution will appear from the following:

Capital in the mines in the four Lake Superior districts in 1889, as per United States census, $54,825,122; increase to July 1, 1892, $15,000,000; total, $69,825,122.

Capital in docks and their equipment at Lake Superior and Lake Michigan ports, built and used exclusively for shipping ore (official), $9,885,665.

Capital employed exclusively in railroad transportation of ore from mines to shipping ports on Lake Superior and Lake Michigan (official), $27,014,594.

Floating capital on the lakes, employed exclusively in ore transportation from upper to lower lake ports (estimated), $29,933,107.

Capital in docks, and in their equipment, for receiving and forwarding ore exclusively, at Lake Erie ports, between Toledo and Buffalo, inclusive of both (official) $12,392,880.

Capital employed exclusively in railroad transportion of ore, inland to mills and furnaces from Lake Erie ports (official), $26,343,617, total $175,394,385.

Mr. Ely, after comparing the entries and clearances for the ports of London and Liverpool with those of New York, said that the estimate of the tonnage movement through the Detroit river in 1889 was at least 10,000,000 tons above the total entries and clearances in the foreign trade at the seaports of the United States, and 3,000,000 tons above the combined foreign and coastwise tonnage of the ports of London and Liverpool. He estimated the value of American shipping now afloat on these waters at $68,925,449, and said that the population on the Great Lakes in ten years had increased 85 per cent. He gave figures of four cities on Lake Superior, five on Lakes Huron and St. Clair, twelve on Lake Michigan and seven on Lake Erie, showing a population in 1880 of 1,342,019, and in 1890 of 2,546,983.

"Strange as it may seem, during several years past, successive attempts have been made in the interest of railroads converging to the Detroit river to secure from Congress bridge franchises at that point of the concentrated traffic of the entire water system. To the Detroit river there is no alternative channel. Through that passage—2,600 feet wide only, and a much less width actually available for deep draft navigation—sweeps the floating tonnage of a continent. Another question is the extension of deep water navigation eastward, from the foot of Lake Erie, by way of the Hudson river to the ocean at New York. The logical sequence of twenty feet of water through the lakes west of Ontario is an outlet, of equal depth, eastward to the Atlantic. The St. Lawrence route involves a shorter season of navigation. It terminates at no center of commercial exchanges. Its improvements now in progress contemplate fourteen feet of water only. It is obvious that this will never meet the demands of American commerce."

The deep water extension to the ocean, then, must be through American territory. The agency of the Erie canal, with its successive enlargements during the last sixty years, in reducing the cost of transportation is incalculable, but a ship channel to the Hudson, either on the line of the Erie canal or by way of Niagara Falls and Lake Ontario, is now required. The Detroit Deep Waterways convention of December, 1891, appealed successfully to Congress for a survey of routes, and an appropriation for this purpose has been reported.

The cost of this work, by whatever route, will be immense, but its relations are so vital that the expenditure must and will be made. Then, without breaking bulk, our lake shipping will pass out over all oceans and share the world's commerce with the strongest.

At the conclusion of Mr. Ely's excellent paper, a unanimous vote of thanks was passed, and it was also resolved to request the Board of Trade to print the address in pamphlet form.

LICENSES SUSPENDED.

The local inspectors at Marquette, Mich., included in the Eighth District, have suspended the licenses of pilots Edwin Allie, Jessie Goodwin and John Parker for sixty days for violating the United States law requiring certain lights to be carried by all kinds of craft on navigable waters between the hours of sunset and sunrise. The inspectors have also reported their tugs to the United States district attorney, for prosecution. The action is the outcome of official inquiry into the drowning of George Cronmiller, near Marquette, on September 27, a small boat containing Cronmiller having been struck by a tug running without a light. Government officials have failed to establish the identity of the tug which ran down Cronmiller.

ESTIMATES FOR LIGHT-HOUSES.

The Lighthouse Board has transmitted to the Secretary of the Treasury estimates of appropriations for the support and improvement of the lighthouse establishment during the next fiscal year. The regular estimates include the following items: Supplies of lighthouses, $408,000; repairs of lighthouses, $710,427; salaries of keepers of lighthouses, $680,000; expenses of light vessels, $300,000; expenses of buoyage, $425,000; expenses of fog signals, $110,775; inspecting lights, $5,000; lighting of rivers, $350,000; survey of lighthouse sites, $1,000.

NOTES.

NATURAL phenomena—A dandy on shore is disgusting to many; but a swell at sea is liable to sicken everybody.

A FEW days ago several bids were opened at the United States Engineers' office, at Duluth, for the improvement of Marquette Harbor. There was a difference of $16,520 in the bids. That of Powell & Mitchell was the lowest, at $65,381. The highest bid was of the Wisconsin Dredge Co., of Manitowoc, at $81,910.

WE note that the following vessels have been classed or rated during the last week by the American Shipmasters' Association in the *Record of American and Foreign Shipping:* American barge C. R. R. of N. J. No. 9, American schooner Mary E. Nason, American ship Wm. H. Conner, British half brigs Edward E. Hutchings and Alice.

THE Carnegie Works, in Pennsylvania, have informed the Navy Department that they cannot name the time of delivery of the vertical plates to complete the turrets of the coast defence vessel Monteray, owing to the continued effects of the Homestead strike. Nothing is now lacking for the completion of that vessel but these plates.

CAPTAIN EDWARD MAGUIRE, of the United States Corps of Engineers, who had been stationed in Philadelphia for some time as engineer of the Fourth Lighthouse district, died at his residence in that city, of heart failure, last week. The body was taken for interment to Detroit, where the Captain had made his home.

WHILE fishing, a man suddenly fell into the water. A fellow fisherman of benevolent aspect promptly helped him out, laid him on his back, and then began to scratch his head in a puzzled manner. "What's the matter?" asked the bystanders. "Why don't you revive him?" "There are sixteen rules to revive drowned persons," said the benevolent man, "and I know 'em all; but I can't call to mind which comes first." At this point the rescued man opened his eyes, and said faintly, "Is there anything about giving brandy in the rules?" "Yes." "Then never mind the other fifteen."

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CLEVELAND, O., OCTOBER 20, 1892.

STOCKLESS anchors are being widely adopted in the mercantile marine of other nations, and from the report of a lake shipbuilder who recently inspected the several patents, they have excellent holding power, stow compactly and are thoroughly reliable under all circumstances of letting go, and getting to the hawse. Some enterprising ship owner should look into the merits of stockless anchors for lake service, as, if adaptable, all catting and fishing equipments might be dispensed with.

THE ancient method of paying salaries is still in force in the life-saving service, and quarterly wages are subject to the convenience, presence or will of the disbursing officer for each district. Considering that semi-monthly payments has been enforced by state legislation in various branches of trade, we would suggest that monthly remittances by check from Washington to the members of the United States Life-Saving Service be adopted. There is no reason in withholding salaries for ninety days, men can always make better terms in purchasing, and feel as good as their fellows, when they are paid promptly that which belongs to them. Besides being an act of justice, the personal check method would be found more expeditious in the disbursement routine by saving a duplic tion of accounts. Will the beneficient innovation be authorized?

THE ship building outlook on the Great Lakes is now more favorable than ever before. Each yard has booked contracts which will keep them busy until well into next spring, and in a few cases work is assured for a year ahead. Scarcely a week passes without one or more contracts coming to the front, and "the woods are still full of them." The million dollar contract for two large passenger steamers, recently secured by a Cleveland firm, is probably the most important now under way, although there are several 4,000-ton keels laid. The United States is not credited with the tonnage afloat and building on the Great Lakes, on account of there being no bureau of international circulation to classify and rate the handsome modern tonnage. However, it is a matter of congratulation to know that lake shipyards are the busiest in the world to-day. In glancing at our neighbors across "the pond," we note from our English exchanges that the Clyde shipyards are in a state of stagnation. Out of 27 shipyards, having a total of 148 berths, but 49 are engaged, and where 60,000 men were formerly employed, there are but 20,000 now at work—a sad commentary on the state of trade in the Clyde district.

A NAVAL officer in one of the popular magazines recently asserted that bodies of seamen lost on Lake Superior were never recovered, and gave the impression that the water was such that a body became petrified, or from other causes, always sunk to the bottom and remained there furthermore, that bathing was not indulged in on the Great Lake. The verdant naval officer quoted an experienced shipmaster on the lakes as being his informant and we let the matter pass for the moment. It is now found that other journals have widely copied this information, which, is distinctly within our province to flatly contradict. From its depth of soundings and geographical position the waters of Lake Superior are necessarily of a low temperature, in other words, even the surface water, in the middle of summer, is decidedly chilly, a feature which perhaps makes a header for a robust person more exhilarating than a dive into tepid surface water would. Therefore, the waters of Lake Superior not only gives up its dead, but furnishes health-giving pastime to some popular summer resorts along its shores. The expansive superiority of the greatest lake in the Universe should not be minimized or vilified without calling its calumniator to task, and this we gladly do, if only out of gratitude for the many hours of disportive pleasures enjoyed on the shores of the king of all lakes.

DIRECT THE CHANNELS OF IMMIGRATION.

Now that the four hundredth anniversary of the discovery of this glorious land is being heralded over the length and breadth of the Union, it is in order to note the over crowding of an undesirable class of emigrants in the larger cities of the lakes. Hordes of the most depraved, ignorant and unscrupulous natives of European hotbeds of vice keep pouring into this country, not with a view to nationalize and become admirable citizens, but rather to assimilate with others of their own class and former nationality in maintaining a colony of their own in our midst, and, while exercising the rights of franchise, disseminate injurious influences and systems of existence such as they have been accustomed to under the whip and lash of law-ridden absolute monarchies and the overshadowing aristocratic rules of the old world countries. Such people as these, take generations to make good citizens, and the majority of them fill our jails, public beneficent institutions, and, worse than all, take the bread out of the mouths of respectable, hard working Americans.

This feature is becoming a crying evil and already calls for heroic legislative measures to thoroughly Americanize the cliques, cabals and colonies foisted upon the body-politic through the negligence, if not criminal laxity, of our emigration code. An American traveling in other countries, and chiefly in those where this off-scouring of creation is imported or exported from, is driven to all the inconveniences which their hide-bound class legislation can inflict, and, if there is any opportunity to heap odium or indignities upon him, they glory in making an exhibition of their pettifogging authority, to the discomfiture of the stranger. Passports, customs regulations, municipal and national vagaries are paraded, and executed, to the disgust of the law-abiding, honorable American; yet, these restrictions are probably found necessary to hold within bounds the very people who seek these shores and in due time lay claim to the inalienable rights of American citizenship.

The evidence of the special commissioners who visited Europe l st year to investigate the subject of emigration warrants the immediate adoption of stringent measures to stop the influx of actual criminals and others of a low moral s andard. Each emigrant destined for these shores should now be required to furnish our consuls with irrefutable evidence of their moral, social and mechanical or skillful ability to properly care for themselves in this country. Instead of prohibiting, as in the case of Chinese, all desirable emigrants should be directed to the several or special localities in present or prospective need of their particular services, in the same manner as Australia rules when any of the five colonies enact measures for a free or assisted emigration, limited only to a stated time. In this way, each State would be provided with the most useful class of skill or labor, and a corresponding benefit to the country would necessarily ensue, without prohibiting, restricting or limiting the people vouched for by our consuls, only in so far as directing where they could and must take up their domicile. By this means the influx of population might be equitably apportioned at the discretion of the emigration officers, and the element which now threatens to undermine the fabric of municipal government through their adhesion in the formation of colonies, become a valuable factor under intelligent direction in the development of "green fields and pastures new."

FAULTY METHOD OF SURVEYS.

It is now almost time that more attention was given to the manner of proceeding in the inspection and surveys called upon damages occasioned by collisions, groundings or other causes. One survey is now usually considered sufficient where two or three should be held, and especially is this so, in the case of large valuable steel tonnage, where frequently the damage can not be closely estimated without the entire structure undergoing a critical and thorough inspection.

The first duty of the master of "a lame duck" after reaching port, should be to call a competent survey, and from that moment until the ship is repaired and pronounced as staunch and seaworthy as she was previous to her casualty, every move should be in accordance with the recommendations of the surveyors, who, as between the assured and assurer represent the line of equity and sound technical and business judgment in the most minute particulars connected with the inclusive transactions.

According to the best method of procedure in these cases, the first survey is simply a preliminary meeting of skillful men authorizing in due form and on their certificate, that the ship, if loaded, and bottom damage is apparent, discharge a portion or all of her cargo and proceed to dry dock for further survey, these instructions, which may be special as regards the discharging, in certain cases, being complied with, the general, or survey to appraise full damages, cost of repairs, etc., is then entered upon, both sides agreeing, repairs are executed according to instructions embodied in the certificate of survey number two, subject to a final survey on the proper carrying out of the repairs and the actual standing of the vessel on their completion, when a joint certificate is again in order and the vessel re-loads her cargo, or, if at its destination, enters upon her ordinary business again. The system here briefly explained is, of course, subject to several modifications, as on first survey a ship may be authorized to proceed on her trip, or to destination for survey, or that certain repairs or work be first done, subject to final survey; or that temporary repairs be placed on her, subject to a limited time for later survey. Any recommendations, however, authorized by competent surveyors, will be at the exercise of their skill and best business judgment, and in the interests of all concerned. The certificates of the first, damage, and final surveys are the vouchers for the action taken, and protects the master, owner and underwriter throughout the transaction. Hitherto, one survey has generally been considered good enough on the lakes, and friction between the owners and underwriters seldom occurs; yet, complications brought about through unadvised or personal action might easily take place, especially in cases of heavy damages, and it is always best to do everything that requires the expenditure of other people's money in regular form and order.

AMERICANS CAN AND SHOULD BUILD AND EQUIP THEIR OWN TONNAGE.

An Ohio Congressman startles his constituents this week by complainingly announcing "that a man can't buy a vessel to-day and float an American flag on it unless he built it here." In the name of all that pertains to nationality, where does this man, with a rage for speaking, expect that an American vessel should be built? or for what purpose are American institutions supported by Americans? To those who have been raised in the industry known as the mercantile marine, such an insinuation as the foregoing could only be credited to one who was decidedly *non compos mentis*, off his base, floundering in a cosmopolitan quicksand; in a word, an irresponsible. If the startling fact recently discovered by the embryo diplomatist appears in such a light to members of the mercantile marine, how would it be received by the naval protectors of our commerce, prestige, and national standing?

The query to be answered to the satisfaction of this Congressman must admit that our ensign should be allowed to float over an Italian built man-of-war to protect Chinese built junks flying the stars and stripes engaged in the commerce of the United States. Our shipping for trans-Atlantic and other superior tonnage might also be ordered from such ports as would inflict the greatest possible industrial hardships on American citizens. The above nationalities for the construction of American naval and merchant ships need not be strictly adhered to, although no doubt quite a number of junks would hail from ports on the Pacific slope. The other colonies of imported foreigners who naturalize only to consolidate more strongly, might also be pleased by influencing wealth, and, perhaps, legislation, to honor the flag from which they had renounced all allegiance, by the placing of a national order for the construction of feluccas, galliots, etc., thus providing work for those who no doubt stand in need of the ducats to be derived therefrom.

The above line of procedure hardly appears just to the patriotic American, native or naturalized, and quoting from the report of a United States Commissioner of Navigation, we find that it is not simply unjust and degrading, but sacrificial in a national degree. The above authority, in speaking of prostituting the national emblem by floating it over foreign bottoms, says: "It is to take from Americans and give to aliens the vast benefits that of right should be enjoyed by our own citizens as builders, owners, merchants, and participants in carrying our own commerce under our own flag to and from all parts of the world. It is to bar the sea to our young men, to relinquish to foreigners the natural and only means of obtaining our proper rank among nations, and a sure course to dwarf and extinguish our naval and commercial power by showing to the world our dependence, inferiority, weakness and imperfection, because, all these would be fairly implied by our inability to build ships of our own."

The foregoing is strong language, but true, in every particular, and there is not a shadow of doubt regarding the standing of the States bordering on the Great Lakes on the question of foreign built ships as the lake States surpass all nations in the building and equipment of the special tonnage required. Yet, this superiority has only been arrived at, because, "a man can't buy a vessel to-day, and float an American flag on it unless he built it here." Otherwise, the essentially national commerce carried on over the Great Lakes would enrich foreigners to the extent of $250,000,000 annually for freight and passenger service, this being the estimated amount paid to foreign vessels trading to American coast ports in 1891,

and our greater volume of tonnage would compensate for the shorter carriage. However, all interests must acknowledge that it is humiliating for a nation of such wealth, power, extent of territory, and national commercial advantages as the United States, to be driven from the seas by the successful competition of other nations, and it is simply the teaching of history that no people ever became a great commercial nation that did not build their own ships. The Egyptians, the Phœnicians, the Greeks, the Italians, the Carthaginians, the Spaniards, the Dutch and the British have held in turn the empire of the sea, but each only so long as they could build their own vessels. Experience has further shown that the nation which does not build her ships will not long have the ability to buy them elsewhere, and it is a foregone conclusion that the nation which confesses its inability to devise any policy by which it may build and equip its own ships, and deliberately sends its people into the market to buy off her neighbors, surrenders her independence, and in peace or war places herself at the mercy of those nations which control the ocean. For these reasons no American ought to deplore the fact "that a man can't buy a vessel to-day and float an American flag on it unless he built it here," for Americans can build and equip their own tonnage, but they cannot keep a trade open in competition with the bounty paid subsidized lines of other nations without receiving similar advantages from the United States Government.

NOTICE TO MARINERS—CORRECTION.

The "Notice to Mariners" No. 97, 1892, just issued, referring to the new lighthouse on old Mackinac Point, contained a typographical error in the visibility of range, as published in all papers.

Recognizing the discrepancy, THE RECORD at once telegraphed Commander Coffin, Naval Secretary of the Light-House Board, who promptly authorized the correction as it appears in another column of this issue, viz.: N. W. ½ W., instead of N. ½ W.; the light may therefore be sighted from its bearings four points more to the westward than quoted by all the leading daily papers on the lakes. The bearing given from McGulpin Point lighthouse as S 98° 30′ W., is evidently a typographical error and no doubt should read S. 88° 36′ W.

A RECENT arrival at Buffalo proved to be 601 bushels of grain short, bills of lading to the contrary notwithstanding. As this called for an outlay of nearly $100 per day during the time the steamer had the grain aboard, the matter has been looked into, and 500 bushels which ought to have been in the cargo was eventually discovered in Chicago, the port of loading. As this left only a shortage of freight and cargo amounting to $50 the owner shook hands with himself and once more gulped down the "cut throat" clause in the bill of lading which so frequently holds that the vessel must discharge more cargo than was put into her. This grain bill of lading is about ready for a re-adjustment as between lake and rail shipments, for shortages do not occur now as they did formerly. The judgments rendered by some erudite luminaries in legal affairs before whom these grain shortage cases are brought for an equitable adjudication would be knocked "galley west" if the shipowner sealed hatches at port of shipment, and broke the seal in the presence of witnesses at the port of discharge. In such a case the amount and quantity stated in the bill of lading would no doubt be subject to revisal. It is also strange that states should differ to the extent they do in their acceptance of the terms and equities involved in a bill of lading.

THE Duluth city council has finally repudiated all intentions to bridge the mouth of their harbor, and are now engaged upon plans for a tunnel. This is without doubt the best advised mode of reaching Minnesota Point, as in two or three years hence Duluthians would have felt aggrieved every time they noted the turn-stile swing bridge blocking the entrance to their commodious harbor, if they had permitted such a setback to be erected there. Better counsel, however, prevailed, and the immens tonnage, both in size and volume, will be allowed free ingress and egress in the future as in the past.

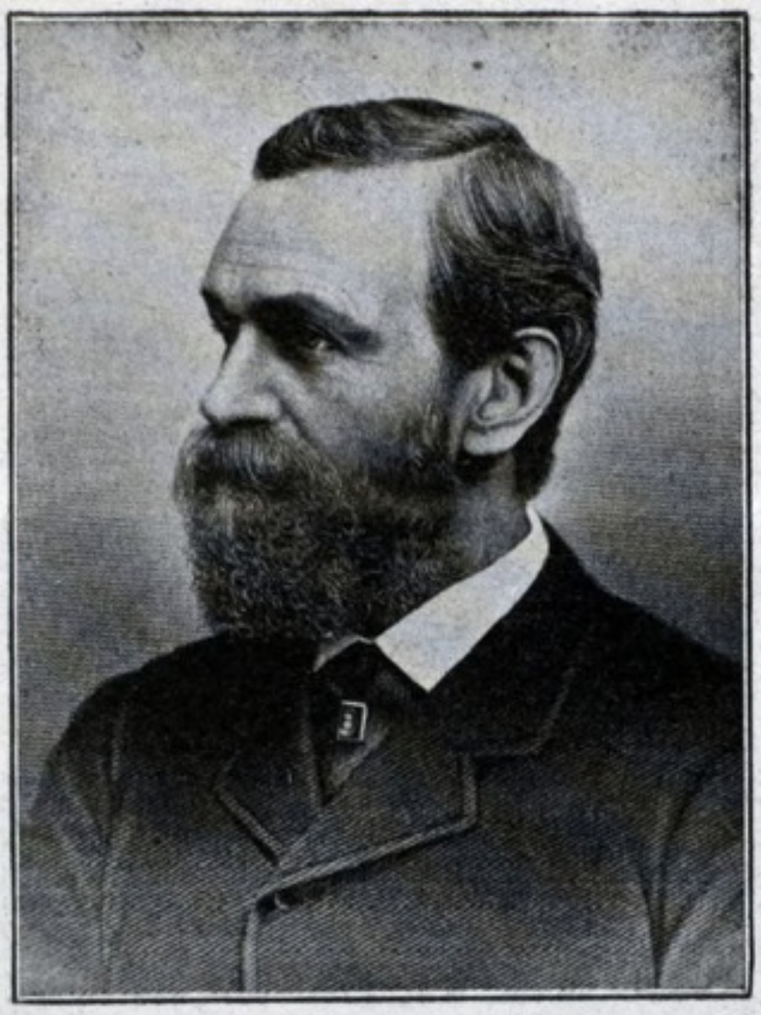
In the adoption of any record of classification for the survey, rating and valuation of shipping, there should be no connection either from a financial or official standpoint between the several interested parties. For instance, it would be simply ridiculous for an owner to be an officer of the bureau or association classing his own tonnage, and this feature would be still more remarkable if the builder stood in such a relation, the representatives of the class record, either hull or machinery surveyors or those higher in office, must perforce, be eminently untrammeled in this respect, as the moment that collusion, partiality, or favoritism becomes apparent, (and it would soon show up) farewell to all faith or dependence in the class or rating entered in that register.

A PIONEER AND ABLE CITIZEN OF THE GREAT LAKE STATES.

It is a pleasure not often afforded THE MARINE RECORD to portray the delineations of features and present a brief biographical sketch of one of the ablest and best citizens that has ever resided on the shores of the States washed by the Great Lakes. The accompanying portrait of George H. Ely, Cleveland, O., is a fair representation of the gentleman at this date, and will no doubt be widely recognized by all who are and have been prominently identified with western and northwestern transportation interests.

The Hon. George H. Ely, with whom were associated his brothers, H. B. and S. P. Ely, were among the most energetic and well advised pioneers of the Lake Superior iron ore mining and railroad transportation projects, and although these industries have now grown to such enormous proportions, the first shipment of ore from the Lake Superior country is clearly within the memory and business career of Mr. Ely. In this connection it is but just to state that in the present rush of daily business we are prone to think too lightly of the pioneer work accomplished by not only those who are now laid at rest, but also by those who are still in active business circles.

Mr. Ely was the first president of the Lake Superior Iron Co., and in 1863 formed a partnership in Cleveland with H. B. Tuttle for the sale of ore and pig iron. In 1877 he was appointed by the Mayor of Cleveland to attend the National Railroad Convention at St. Louis, to promote the construction of the Texas & Pacific railroad across the continent, and he has been identified with the earliest promotion of four or five different railroad enterprises in the far west. In 1879 he was sent as a delegate from the Cleveland Board of Trade to the Lake Improvement Convention, held at St. Paul, Minn., where he was honored by being chosen president, and which convention commissioned him to go to Washington to advocate and secure the improvement of St. Mary's river by the Government, and the completion of the lock and canal. This effort in which Mr. Ely was prominent, was eminently successful, and there was secured an appropriation of $100,000. He again went to Washington in the following winter and secured more active work in the measures then under way. In November, 1879, he was chairman of a committee of the Cleveland Board of Trade that was sent to Detroit to oppose before a government commission of engineers, the bridging, by the railroads, of Detroit river, a scheme that had powerful backing, and was then on the point of success. Mr. Ely promptly showed the damage that such a structure would be to the entire shipping interests of the lakes and in the February following, the Board of Trade sent him to Washington on the same project, there he appeared before the Commerce Committee of the House and Senate, where he assisted in demolishing the whole scheme, and won the admiration and gratitude of everybody in this section, except, perhaps, that of some important railroad managers. He has all his life been regarded as an especial guardian and champion of river and harbor interests, and what he has done for the iron interests can not be told within the limits of so brief an article as this. The foregoing by no means comprises the life labors, either public or private, of Mr. Ely, and the four years that he was elected for, and served in the Ohio Senate, but more closely identified his sterling worth in legislative matters with that of his success in commercial life. Mr. Ely is now president of the Central National bank, president of the Western Iron Ore Association, besides filling a host of other laudable and honorable positionsin humane, industrial and benevolent organizations.



HON. GEORGE H. ELY.

Personally, Mr. George H. Ely is a man of broad and liberal views, great cultivation, possessing a fund of general and commercial information that he knows how to use; of agreeable presence, and imbued with the doctrine that the rights and claims of men lie in their usefulness and not in their worldly possessions. He is genial and ready to extend a favor to any one in need of help. He carries his Christianity into his daily life, and honesty is one of the fundamental points of his character. He is an effective public speaker, and has many times been called upon to make good use of that gift. Among his business and personal associates Mr. Ely is counted an honorable, busy, upright and thoroughly manly man, and he is likely to spend many years to come in continuing the good work of the past. It may further be mentioned that Mr. Ely has been tendered the Congressional nomination by his Ohio friends, an honor which he courteously, though firmly, declines, and all interests, more especially the marine, graciously acquiesce in his decision, knowing that a nonpareil is a good man to have at home handy for important legislative emergencies.

THE FREIGHT SITUATION.

THE RECORD is able to note some gratifying advances since the last issue. The Ashland rate is now $1.30 and more has been paid in one instance this week. Grain is 4 cents from Duluth and 4½ cents from Fort William to Buffalo, with a liberal demand for boats. The Chicago rate continues weak, however, and the Escanaba rate of 75 cents on ore to Ohio ports still holds, although 80 cents is being paid to Buffalo and 85 cents to boats unloading at two docks.

The hard coal rates from Buffalo to Lake Michigan have advanced uniformly, and 80 cents is now paid to Racine, 75 cents to Chicago, and 70 cents to Milwaukee. Lake Superior coal rates are unchanged, although bonuses have been paid in some instances for boats.

Lumber freights have advanced also, and the rates are now based on $2 from Bay City to Ohio ports and $2.25 to Buffalo. The general outlook is good for the remainder of the season and almost all classes of tonnage now see their way clear to earn a little money.

COLONEL LUDLOW'S VINDICATION.

A special from Washington to the New York *Herald* states:

The case of Colonel Ludlow against the Lighthouse Board is still far from settlement. Secretary Foster declines to ask the War Department to restore the Colonel to his old position in the lighthouse districts on the lakes. He has suggested to the friends of Colonel Ludlow that if he desires vindication he had better ask for a court of inquiry consisting of army officers. The Secretary says he will not overrule the action of the majority of the Lighthouse Board in recommending that the Colonel be not restored to the control of the the lights on the lakes.

At the War Department this decision of Secretary Foster is not favorably received. War Department officials can see no reason why a court of inquiry consisting of army officers should be called upon to investigate a matter which belongs entirely to the civil branch of the government. As far as the War Department is concerned, Colonel Ludlow has already been vindicated by the action of the Lighthouse Board in approving the project for new lights on the lakes proposed by Colonel Ludlow, which was the direct cause of Colonel Ludlow's detachment. If the Treasury Department will not restore Colonel Ludlow after this vindication, the War Department will not urge it, having no desire to push an officer upon a department that does not want him.

The commercial interests of the lakes, which have been benefited by Colonel Ludlow's action in erecting more lights than the Lighthouse Board were at first willing to approve, insist that he shall be restored, and if he is not they threaten a lively time for the Treasury Department next Congress. Senator McMillan says it is his purpose to call the matter up for Congressional investigation the moment Congress convenes, unless the Secretary of the Treasury takes steps publicly to vindicate Colonel Ludlow before the session opens.

CONTRACT FOR A NEW STEEL STEAMER.

A contract has been closed between the Globe Iron Works Co., Cleveland, O., and David Wallace and others, of Lorain, for a new steel steamer. Her dimensions will be: Length over all, 304 feet; keel, 284 feet; beam, 38 feet; depth of hold, 24 feet. She will be propelled by compound engines with cylinders 27 by 50 inches in diameter, and will have two boilers, nine feet in diameter and fourteen feet long. She will be completed in May. The contract price is $160,000.

CASUALTIES.

The steamer Merrimac arrived at Escanaba on Wednesday, and loaded 300 tons of ore, having jettisoned that amount while stranded near Death's Door. The boat seemed to be but little damaged.

A dispatch has been received from Sturgeon Bay, stating that: "The schooner J. E. Gilmore was driven ashore Wednesday morning at Garrett's Bay, near Death's Door. The work of stripping is already begun and the wreck will be abandoned. The Gilmore was built in 1867, rated B1, and has a Lloyd's valuation of $3,500 She was owned by John Gerlach, of Cleveland. She is insured."

LLOYD'S REGISTER SHIPBUILDING RETURNS

FOR THE QUARTER ENDED 30TH SEPTEMBER, 1892.

From the returns compiled by Lloyd's Register of Shipping, it appears that excluding warships, there were 385 vessels of 678,780 tons gross under construction in the United Kingdom at the close of the quarter ended 30th September, 1892.

Comparing the present returns with those for the quarter ended 30th June, 1892, a decrease is observed in the tonnage of vessels under construction of nearly 100,000 tons. The June returns were themselves less than those for the March quarter to the extent of nearly 65,000 tons. It will thus be seen that the work in hand has, during the past six months, diminished by 20 per cent.

Sailing vessels no longer form so remarkable a feature as they have done in recent returns. The construction of sailing tonnage reached its highest level in December last, when the returns showed 198,405 tons in hand, or more than 100,000 tons in excess of the present figures. Proportionately to the total work in hand, the highest point was attained last September when the sailing tonnage formed over 26 per cent.; now it forms only 14 per cent.

Of the tonnage under construction in the United Kingdom at the end of September, excluding that being built for foreign and colonial owners, over 93 per cent., and of the tonnage being built for foreign owners 88 per cent., was under the supervision of the Surveyors of Lloyd's Register with a view to classification by this society. Of the total vessels under construction in the United Kingdom, 344 of 630,293 tons (or nearly 93 per cent. of the tonnage) were under the society's supervision.

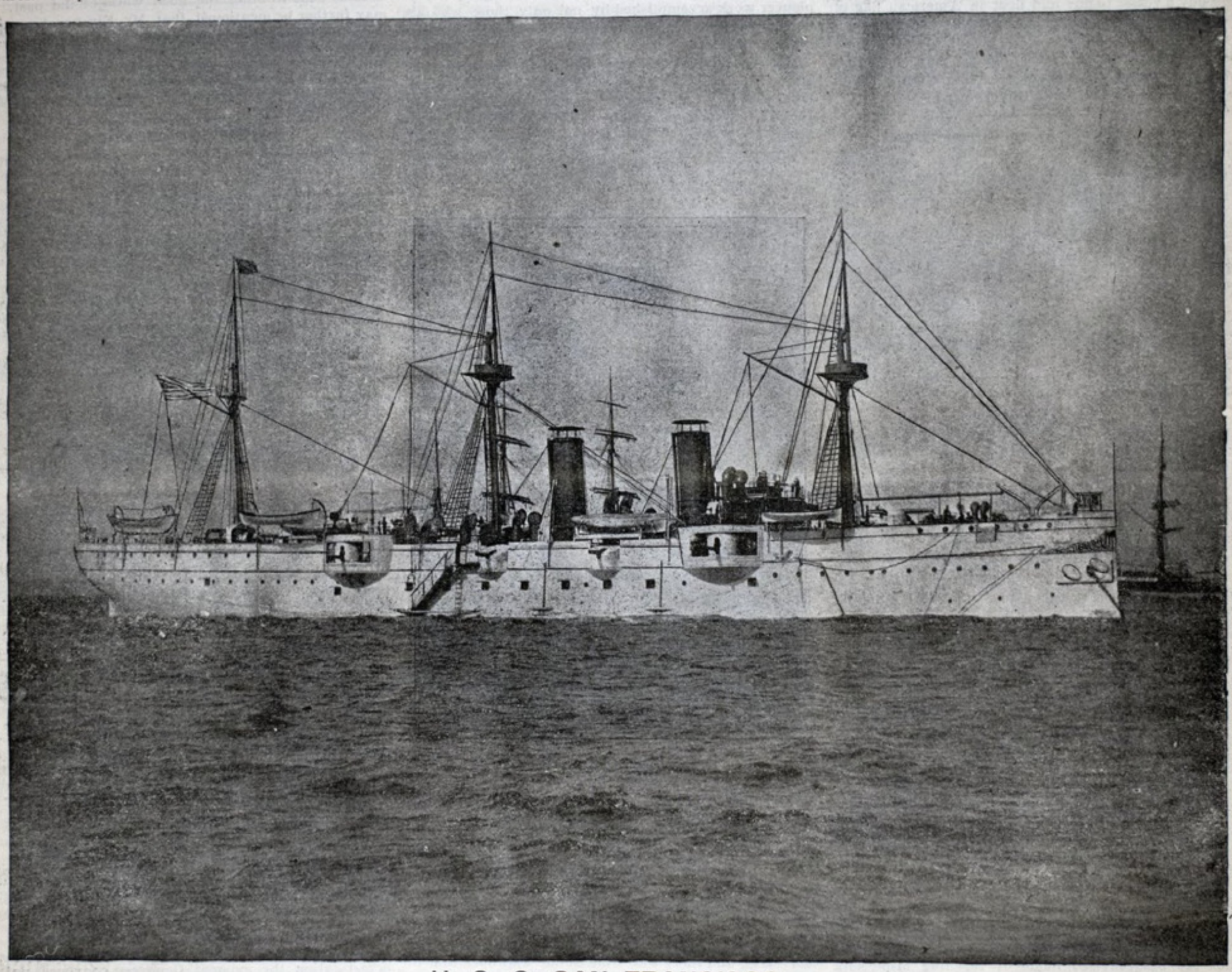
In the statements published by Lloyd's Register, attention has been drawn to the remarkable decrease each quarter this year in the orders for new vessels as shown by the returns of vessels "preparing" (*i. e.* ordered, but not commenced). The decline still continues, and at the end of September only 40 vessels of 72,716 tons are reported in this category. This is less than one-fourth of the tonnage preparing at the end of 1891.

THE U. S. CRUISER SAN FRANCISCO.

The United States protected cruiser San Francisco, herewith illustrated, is the pride of the Pacific coast, and fully demonstrates that ship building is not confined to the Atlantic coast or the Great Lakes, and that the workmen and naval constructors of the far west are nowise behind their brethren of the east. The San Francisco was built in the city whose name she bears, at the Union Iron Works, at a cost of $1,428,000. She was designed, like her sister cruiser, the Newark, in the Navy Department, to meet the requirements of the Naval Board. The vessel is 310 feet in length, and her beam is 49.2 feet, her displacement being 4,083 tons. Her maximum speed is 19.20 knots anhour. The engines are horizontal triple expansion type, and were designed in the Navy Department.

The San Francisco's protection deck is complete, 2 to 2½ inches thick on flat and 3 inches on inclined parts. The main battery consists of twelve 6-inch breach-loading rifled cannon, those nearest the extremities being mounted on the poop and forecastle. The secondary battery is made up of four 6-pounder, rapid-firing guns, four 3-pounders, two 1-pounders, three 37-millimetre revolving cannon and four Gatlings. She is also supplied with torpedo tubes. It will thus be seen that the San Francisco can take good care of herself in time of need.

At present the San Francisco is with the Pacific Squadron. Capt. W. T. Sampson was in command until recently, when he was relieved by Capt. J. Crittenden Watson.



U. S. S. SAN FRANCISCO.

INVENTIONS CONNECTED WITH MARINE ENGINEERING, SHIPBUILDING AND APPLIANCES FOR STEAMSHIPS.

There are not many patents connected with the marine interests of the the United States brought forth by the inventive mechanical skill of those connected with the shipping of the country. That the British are still seeking to advance in the equipment and construction of vessels is evidenced by the following list of recent patents applied for: Ships and other floating bodies, shaft couplings, packing rings for pistons, constructing masts and yards of steamers, marline spike and spanner combined, piston and gland packing, reversing blades of screw propellers, propelling vessels, engine for propelling boats without steam, propelling ships, woven wire for ships' berths, raising and lowering ships' boats, war vessels, tank ships or boats, floating vessels, anchors, divers' dresses and appurtenances, metallic packing, preventing fouling of screw propellers, construction of lifeboats, governors of steam engines, multitubular boilers, light draught steamers, metallic packing for marine engines, valves for steam engines, ships' logs, boiler for use on steamships, marine boilers, marine propellers, composition for coating boilers, double-acting hand or steam steering geer, holding and disengaging gear for boats, propulsion of ships, preventing vessels foundering, valve motions for steam engines, apparatus for calming force of waves, preventing corrosion of propeller shafts, mechanism for closing collision doors, plural screw engines, forced draught in furnaces of steam boilers, apparatus for propelling boats, ventilating the hold of ships, process for covering bottoms of ships, tubes for use in boilers, apparatus for laying off course of vessels at sea, sight feed lubricators, fire bridges of steam boilers, propellers, valves for cut-off gear of steam engines, means for propelling vessels, life-saving apparatus for use at sea, sails and rigging of ships and steamers, ships' windlasses, ships' lamps and lanterns, marine engine governors, signalling at sea, rockets for marine purposes, preserving tail shafts of steamers from corrosion, helical propellers for ships, bolts for use in manufacture of boilers, a marine motor, water-tube steam boilers, device for self-releasing ships' sails, boat raising and lowering gear, hydropropulsion of vessels, construction of rotary engines, packing for stuffing boxes, condensation of steam, ship locomotives.

THE American Ship Windlass Co., of Providence, R. I., have machinery made by them in use on ship-board in this country costing over $2,000,000, and yet the repairs on this for the last year have been less than $6,000. This speaks well for the durability of their machinery.